

**JOHN WAYNE AIRPORT
ORANGE COUNTY**



NOISE ABATEMENT PROGRAM QUARTERLY REPORT

**For the period:
October 1, 2020 through December 31, 2020**

Prepared in accordance with:

AIRPORT NOISE STANDARD

STATE OF CALIFORNIA

California Code of Regulations

Airport Noise Standards

Title 21: Public Works

Division of Aeronautics (Department of Transportation)

Chapter 6. Noise Standards

Submitted by:

A handwritten signature in blue ink, appearing to read "Barry A. Rondinella".

Barry A. Rondinella, A.A.E./C.A.E.

Airport Director

John Wayne Airport, Orange County

INTRODUCTION

This is the 192nd Quarterly Report submitted by the County of Orange in accordance with the requirements of the California Airport Noise Standards (California Code of Regulations, Title 21: Public Works, Division 2.5, Division of Aeronautics (Department of Transportation), Chapter 6. Noise Standards). Effective January 1, 1986, the criteria for defining "Noise Impact Area" was changed from 70 dB to 65 dB Community Noise Equivalent Level (CNEL). Under this criteria, John Wayne Airport currently has a "Noise Impact Area."

NOISE IMPACT SUMMARY

Caltrans' Aeronautics Program has established guidelines in the California State Noise Standard to control residential area noise levels produced by aircraft operations using the State's airports. Under those guidelines, residential noise sensitive areas exposed to an average Community Noise Equivalent Level (CNEL) of more than 65 dB define the "Noise Impact Area." John Wayne Airport uses ten permanent remote noise monitoring stations (NMS) located in Newport Beach, Santa Ana, Tustin and Irvine to measure noise levels, at the following locations:

MONITOR STATIONS

NMS-1S: Golf Course, 3100 Irvine Ave., Newport Beach
NMS-2S: 20162 S.W. Birch St., Newport Beach
NMS-3S: 2139 Anniversary Lane, Newport Beach
NMS-4S: 2338 Tustin Ave., Newport Beach
NMS-5S: 324 ½ Vista Madera, Newport Beach
NMS-6S: 1912 Santiago, Newport Beach
NMS-7S: 1131 Back Bay Drive, Newport Beach
NMS-8N: 17372 Eastman Street, Irvine
NMS-9N: 1300 S. Grand Avenue, Santa Ana
NMS-10N: 17952 Beneta Way, Tustin

The map in Figure 1 shows the general location of each permanent remote monitor station.

Figure 2 shows the Airport's "Noise Impact Area" for the previous year (January 1, 2020 - December 31, 2020). The Figure 2 information was developed by Harris Miller Miller and Hanson Inc., in consultation with John Wayne Airport. CNEL values measured for the period and current digitized land use information were utilized to calculate the land area acreages, number of residences and estimated number of people within the "Noise Impact Area".

**FIGURE 1
NOISE MONITORING STATIONS (NMS)
LOCATION MAP**

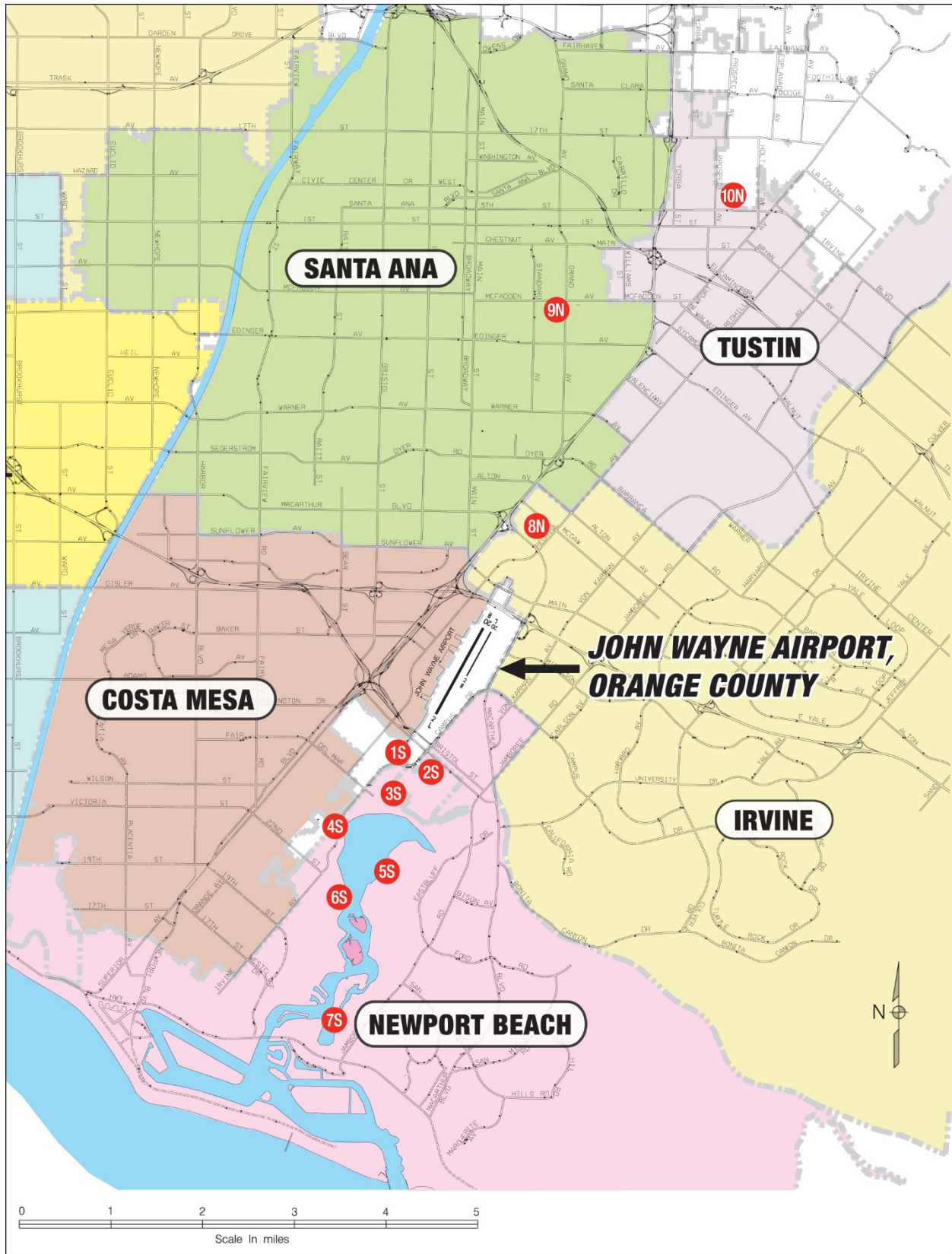
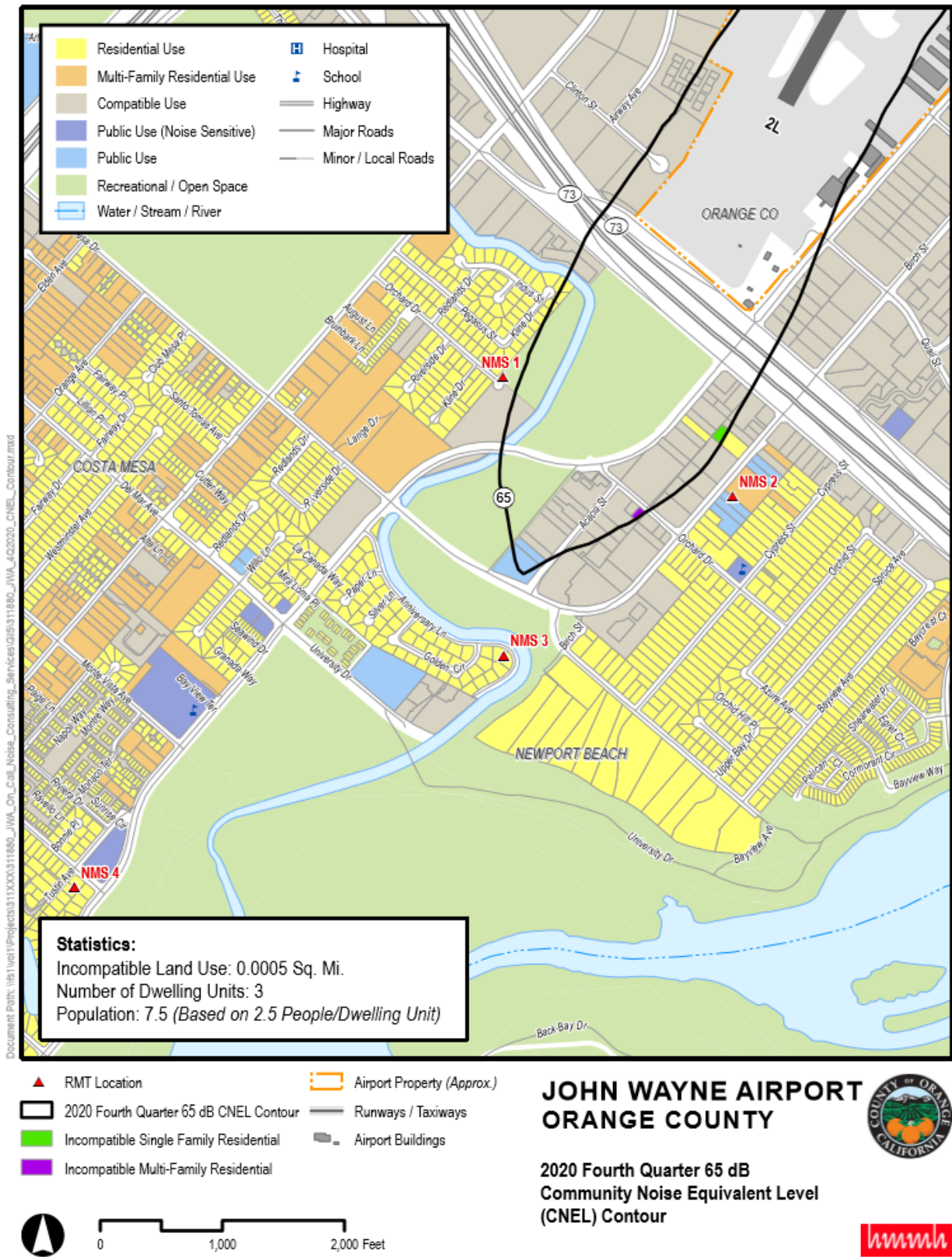


FIGURE 2



AIRCRAFT TRAFFIC SUMMARY

The Airport traffic summary for this quarter is shown in Table 1 below. Air Carrier operational count histories and average daily departure counts are illustrated in Tables 9 & 11.

TABLE 1
 LANDING AND TAKEOFF OPERATIONS
 October - December 2020

Period	Air Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
October	3,844	0	3,259	22,905	229
November	4,201	0	2,747	19,088	232
December	4,301	0	2,640	18,061	224
Fourth Quarter	12,346	0	8,646	60,054	228
Twelve Months 01/01/20 - 12/31/20	51,620	0	31,218	238,340	226

NOTE: (1) GA Jet figures include a 5% factor for operations not identified by the JWA noise monitor stations.
 (2) Counts in this column are based upon records provided by the local FAA representatives.

COMMUNITY NOISE EQUIVALENT LEVELS

The monthly, quarterly and twelve month Community Noise Equivalent Level (CNEL) average values for each monitor station are shown in Table 2, while daily CNEL values are shown in Tables 3 through 5. Insufficient data is indicated by “#N/A” entries in each table. Also, “*#N/A” entries in each table indicate there were no aircraft related noise events.

Average Single Event Noise Exposure Level (SENEL) values for Air Carrier and General Aviation Jet aircraft are shown in Tables 6 through 8.

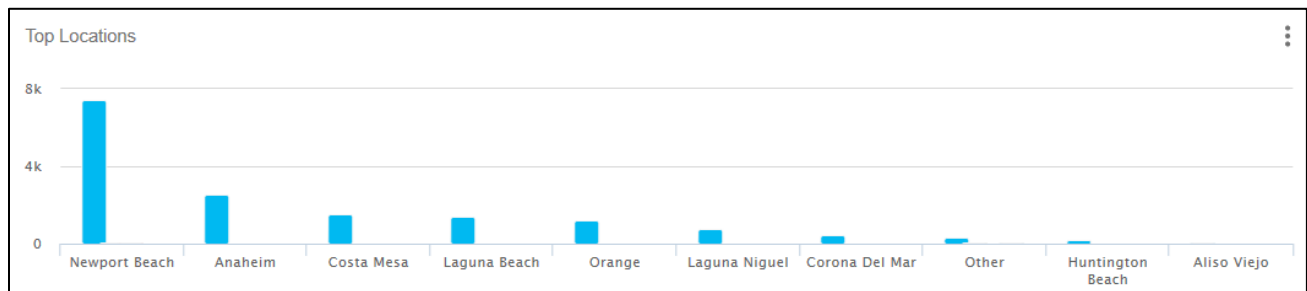
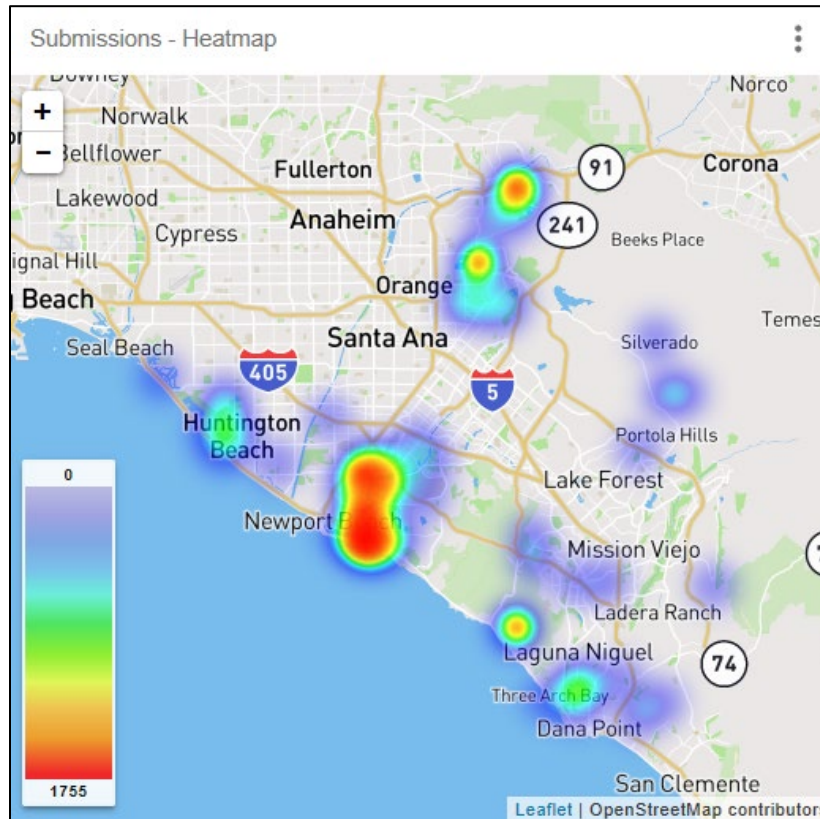
ACOUSTICAL INSULATION PROGRAM

Four hundred eighteen residences in the Santa Ana Heights area have been sound attenuated and an avigation easement reserved through the County’s Acoustical Insulation Program, which closed in December 2009. The County has also acquired 46 residences as part of the Purchase Assurance Program, many of which were acoustically insulated, an avigation easement reserved and then resold. Among these County acquired homes, those located within areas designated for Business Park uses were razed, avigation easements were reserved, and the land resold for compatible Business Park uses. A total of 464 residences in the Santa Ana Heights area have been purchased or otherwise made compatible through the County’s Purchase Assurance and Acoustical Insulation Programs. Three dwelling units in Santa Ana Heights remain in the “Noise Impacted Area” (within 65 dB CNEL contour).

COMPLAINT TOTALS (October 1, 2020 - December 31, 2020)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During October 1, 2020 through December 31, 2020, the Office received 15,740 complaints from local citizens. This is a 43.4% decrease from the 27,792 complaints received last quarter. It is a 60.9% decrease from the 40,212 complaints received during the same quarter last year. Figure 4 shows the distribution of the quarterly complaints from local communities.

**FIGURE 3
HISTOGRAM BY COMMUNITY**



Note:

- Newport Beach – 7,449 submissions from 52 different points of contact.
- Anaheim – 2,562 submissions from 17 different points of contact.
- Costa Mesa – 1,530 submissions from 15 different points of contact.
- Laguna Beach – 1,421 submissions from 4 different points of contact.
- Orange – 1,213 submissions from 6 different points of contact.
- Laguna Niguel – 781 submissions from 4 different points of contact.
- Corona Del Mar – 470 submissions from 2 different points of contact.
- Other – 304 submissions from 77 different points of contact.
- Huntington Beach – 198 submissions from 14 different points of contact.
- Aliso Viejo – 72 submissions from 3 different points of contact.
- 76% of submissions were from a complaint subscription service.

TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 01/01/20 through 12/31/20
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Jan 2020	67.7	66.6	66.5	59.7	59.5	60.6	57.1	67.5	42.8	56.6
# Days	31	31	31	31	31	31	30	30	30	31
Feb 2020	67.1	66.2	66.5	59.3	58.7	60.6	56.0	67.1	42.9	55.4
# Days	29	29	29	27	29	29	29	29	28	29
Mar 2020	65.3	64.7	64.2	58.6	58.0	58.7	55.4	66.6	44.2	55.5
# Days	31	31	31	31	31	31	31	31	27	31
Q-1 2020	66.8	65.9	65.8	59.2	58.8	60.1	56.2	67.1	43.3	55.9
# Days	91	91	91	89	91	91	90	90	85	91
Apr 2020	59.2	58.6	57.7	52.7	51.6	52.0	49.1	60.7	44.9	49.5
# Days	30	30	30	30	30	30	30	30	25	30
May 2020	60.0	59.5	58.9	52.9	51.5	52.4	49.1	61.0	42.4	48.8
# Days	31	31	31	31	31	31	31	31	25	31
Jun 2020	62.1	61.6	61.1	54.4	53.2	54.7	50.8	62.8	41.4	50.8
# Days	30	30	30	30	30	30	30	30	26	30
Q-2 2020	60.6	60.1	59.5	53.4	52.2	53.2	49.7	61.6	43.1	49.8
# Days	91	91	91	91	91	91	91	91	76	91
Jul 2020	63.3	63.0	62.1	55.8	54.7	56.0	51.4	64.2	40.4	52.2
# Days	31	31	31	31	31	31	31	31	25	31
Aug 2020	63.7	63.3	62.6	55.7	54.8	56.3	52.1	64.5	42.2	52.5
# Days	31	31	31	31	31	31	31	31	22	31
Sep 2020	63.7	63.3	62.8	55.1	54.2	55.6	51.2	64.0	39.4	51.9
# Days	30	30	30	30	30	30	30	30	27	30
Q-3 2020	63.6	63.2	62.5	55.5	54.6	56.0	51.6	64.2	40.7	52.2
# Days	92	92	92	92	92	92	92	92	74	92
Oct 2020	63.7	63.1	63.1	55.5	54.7	56.3	52.5	64.2	43.7	52.6
# Days	31	31	31	31	31	31	30	31	21	31
Nov 2020	63.5	63.3	62.5	56.1	55.2	56.1	52.6	64.3	41.1	52.0
# Days	30	30	28	30	30	30	30	30	23	30
Dec 2020	62.9	62.6	62.4	55.7	54.4	56.4	51.9	63.4	43.0	51.5
# Days	31	31	31	31	31	31	31	29	27	31
Q-4 2020	63.4	63.0	62.7	55.8	54.8	56.3	52.3	64.0	42.7	52.1
# Days	92	92	90	92	92	92	91	90	71	92
Q-1 2020 thru Q-4 2020										
Total	64.1	63.5	63.2	56.5	55.8	57.1	53.2	64.7	42.6	53.1
# Days	366	366	364	364	366	366	364	363	306	366
Q-4 2019 thru Q-3 2020 (Previous 4 Quarters)										
Total	65.5	64.7	64.4	57.6	57.1	58.4	54.4	65.8	42.8	54.5
# Days	366	366	366	363	366	366	365	365	311	366
Change from Previous 4 Quarters										
	-1.4	-1.2	-1.2	-1.1	-1.3	-1.3	-1.2	-1.1	-0.2	-1.4

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
 October 2020

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	64.3	63.3	63.1	54.6	53.7	54.7	52.0	63.6	29.4	51.2
2	63.8	62.5	62.6	54.4	53.5	55.2	51.1	63.9	*#N/A	51.6
3	62.2	61.0	61.3	53.3	52.6	54.0	50.2	63.2	42.6	52.0
4	63.1	62.5	62.4	54.2	53.2	54.7	51.2	63.7	38.2	52.4
5	63.6	63.1	62.5	54.5	53.8	55.5	51.8	63.7	*#N/A	52.4
6	62.4	62.4	61.6	53.8	53.5	54.2	50.4	63.7	*#N/A	51.8
7	63.3	62.7	62.6	55.6	54.6	56.2	52.2	64.3	39.1	52.8
8	65.2	64.7	64.6	57.9	56.6	58.3	54.8	65.0	38.8	53.9
9	64.8	64.3	64.1	57.3	56.5	57.7	54.2	65.1	42.7	54.4
10	62.8	62.1	61.9	55.9	54.8	55.6	52.1	63.1	29.0	52.9
11	64.1	63.5	63.3	56.2	55.5	56.6	53.0	65.1	39.3	53.6
12	64.6	63.8	63.8	55.9	55.1	56.2	51.7	64.2	*#N/A	53.1
13	62.8	62.7	62.2	53.8	53.6	54.8	51.1	62.6	30.5	50.7
14	63.2	62.7	62.1	54.6	53.2	54.5	50.6	64.3	43.1	51.6
15	64.1	63.3	63.4	55.0	54.0	55.8	51.9	66.0	39.3	53.0
16	64.4	63.8	64.1	55.4	55.6	55.8	52.0	64.7	43.8	52.4
17	62.8	62.5	62.2	54.8	53.5	55.1	51.1	64.2	49.7	52.6
18	64.2	63.7	64.8	55.3	56.1	57.0	53.8	65.4	36.5	54.8
19	65.0	64.3	65.4	57.6	56.5	59.1	55.0	65.3	49.1	53.4
20	64.3	63.6	64.3	57.2	56.2	58.1	53.4	63.8	43.2	52.9
21	64.4	63.5	63.6	56.7	55.3	56.6	52.2	64.5	38.4	53.1
22	64.9	64.6	64.0	57.6	55.9	57.8	54.3	65.0	49.6	54.2
23	65.1	64.3	64.3	57.5	56.4	58.1	54.9	65.7	46.4	55.2
24	63.8	63.1	63.3	56.4	55.5	57.0	53.5	63.9	43.2	53.5
25	63.7	64.1	62.9	56.1	56.2	56.9	53.7	65.5	*#N/A	54.4
26	51.3	48.6	62.6	40.2	30.4	57.6	#N/A	55.7	32.6	41.9
27	58.1	58.2	59.5	48.1	48.1	53.8	45.1	62.7	#N/A	48.8
28	63.9	63.6	63.3	56.0	55.5	56.5	53.1	63.8	#N/A	51.1
29	63.8	63.3	62.6	55.8	54.5	55.8	51.9	64.0	#N/A	51.5
30	64.3	64.3	63.1	55.9	55.0	55.8	51.6	63.8	#N/A	50.7
31	61.9	60.7	61.0	53.5	53.5	54.4	50.6	62.4	#N/A	49.1
Days	31	31	31	31	31	31	30	31	21	31
En. Avg	63.7	63.1	63.1	55.5	54.7	56.3	52.5	64.2	43.7	52.6

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
November 2020

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	62.6	62.0	61.3	53.8	53.1	54.0	50.9	64.4	#N/A	51.6
2	63.7	63.0	62.9	56.0	55.3	56.0	51.8	64.0	#N/A	52.2
3	63.0	62.6	*#N/A	55.6	54.3	55.4	52.6	63.6	#N/A	51.9
4	63.6	63.5	#N/A	55.1	55.1	56.0	52.5	64.0	#N/A	50.7
5	63.7	63.0	63.1	55.5	53.6	55.1	51.3	63.5	#N/A	49.8
6	63.8	63.1	62.7	56.9	55.0	56.9	52.5	65.4	42.5	53.8
7	62.0	62.6	60.8	55.0	55.8	54.7	53.1	63.4	37.7	51.5
8	63.0	63.9	62.1	55.2	57.5	56.7	54.8	66.0	42.0	54.7
9	63.8	64.0	62.6	57.0	56.2	56.6	53.6	64.4	42.7	52.2
10	63.3	63.0	62.7	55.6	55.4	55.8	52.2	63.5	38.2	50.7
11	63.5	63.8	62.6	56.4	55.4	55.9	52.7	64.2	34.1	51.4
12	64.7	64.7	63.4	57.2	56.5	56.0	53.6	64.1	33.9	52.2
13	63.9	64.1	63.4	57.6	56.6	57.2	54.2	65.2	42.5	53.5
14	62.6	62.6	61.7	55.8	55.3	55.8	52.2	62.4	41.0	50.5
15	63.1	62.6	62.3	54.2	53.4	54.9	50.5	63.5	39.5	49.8
16	63.1	62.3	61.6	55.0	53.4	54.6	50.7	62.8	*#N/A	49.3
17	62.9	62.6	61.4	55.5	53.3	54.7	50.8	63.9	44.9	51.3
18	63.7	63.8	62.9	56.3	56.0	56.7	52.9	64.4	37.7	52.2
19	64.9	64.6	64.0	57.4	56.9	57.6	54.5	64.6	32.1	53.5
20	64.5	64.4	63.4	57.4	56.3	57.2	53.0	64.6	36.6	53.1
21	64.1	63.6	63.2	56.6	55.5	57.0	53.0	64.4	31.0	51.2
22	63.8	63.5	62.8	57.0	55.5	56.6	52.8	64.9	37.9	53.4
23	64.5	63.8	62.9	58.0	55.8	57.3	54.5	65.8	42.9	53.7
24	65.2	64.9	64.1	58.1	57.1	57.2	55.4	66.0	42.9	54.5
25	64.6	64.5	63.8	58.4	57.6	57.9	54.6	66.0	42.9	54.3
26	60.0	59.8	61.2	53.1	52.0	56.5	49.5	58.5	*#N/A	44.3
27	55.3	55.6	58.6	45.7	45.7	54.1	40.6	60.8	44.4	44.0
28	61.4	60.8	60.3	53.4	52.6	53.2	49.1	62.8	43.3	48.9
29	63.6	63.3	62.4	54.7	53.9	55.1	50.9	65.3	34.2	50.8
30	64.0	63.7	62.3	55.6	54.1	55.1	50.7	64.6	43.8	52.0
Days	30	30	28	30	30	30	30	30	23	30
En. Avg	63.5	63.3	62.5	56.1	55.2	56.1	52.6	64.3	41.1	52.0

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
 December 2020

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	63.4	62.9	62.0	55.3	53.7	53.4	51.1	63.7	28.2	50.6
2	62.5	62.0	60.4	54.7	52.6	52.8	50.3	61.6	40.2	47.3
3	58.5	57.7	58.9	49.6	47.5	54.1	45.8	61.2	38.5	40.0
4	61.1	60.8	59.7	51.2	50.7	50.7	45.5	61.8	*#N/A	45.4
5	60.3	60.0	58.5	51.9	49.6	50.2	45.3	61.0	40.9	45.8
6	62.0	61.7	60.0	52.9	51.1	50.5	46.5	64.0	40.3	50.0
7	62.2	61.5	62.2	55.0	52.4	56.2	49.5	61.8	42.2	48.2
8	57.8	57.1	58.2	49.4	47.3	52.1	43.2	61.0	43.4	39.5
9	61.9	62.4	61.0	54.9	54.2	54.4	50.6	63.4	32.9	52.0
10	63.2	62.9	62.2	57.3	55.6	56.9	53.5	64.2	40.1	54.3
11	64.1	63.8	62.3	57.4	55.9	57.0	53.8	64.3	41.9	54.4
12	61.9	61.8	61.4	55.9	54.8	56.2	52.0	62.0	*#N/A	52.2
13	61.7	61.9	61.0	55.0	53.9	54.6	51.0	64.0	47.3	52.4
14	63.6	63.3	62.1	56.9	55.9	56.6	53.7	64.1	42.2	53.5
15	59.4	58.3	63.2	51.2	50.5	59.2	48.1	59.9	43.7	38.5
16	63.0	63.2	62.0	55.7	54.8	55.6	51.9	63.2	45.7	52.2
17	64.3	64.3	64.0	57.7	57.3	58.4	55.1	64.7	44.7	54.2
18	64.6	64.7	64.1	57.4	56.6	57.7	54.5	63.9	42.9	52.0
19	63.0	62.6	62.3	55.1	54.6	55.6	52.3	63.3	44.2	50.6
20	63.1	62.8	62.1	54.3	53.1	54.5	50.7	63.7	42.0	49.1
21	63.1	62.4	60.7	54.7	53.4	54.5	50.4	64.3	39.4	50.1
22	64.6	64.0	63.6	57.8	55.4	56.7	52.4	65.2	44.5	54.1
23	65.4	64.5	65.9	57.1	55.2	59.6	52.6	61.9	41.1	45.3
24	60.1	59.5	60.5	51.8	50.8	54.5	47.5	61.3	*#N/A	47.2
25	60.8	60.5	59.5	54.3	53.0	53.5	50.8	61.5	41.0	50.4
26	64.2	64.0	63.7	57.4	56.3	57.2	53.7	65.3	38.4	54.2
27	64.9	64.5	63.9	58.7	56.7	57.9	55.3	66.6	46.9	56.8
28	65.6	64.8	64.8	58.8	57.9	59.1	55.7	65.4	*#N/A	54.9
29	62.2	60.9	65.9	55.2	54.6	61.4	51.6	61.0	46.8	43.5
30	63.7	63.4	62.4	55.0	54.7	55.8	51.6	#N/A	42.3	51.9
31	63.5	62.9	62.3	56.6	55.6	56.1	53.1	#N/A	44.6	51.1
Days	31	31	31	31	31	31	31	29	27	31
En. Avg	62.9	62.6	62.4	55.7	54.4	56.4	51.9	63.4	43.0	51.5

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 6
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class A
October - December 2020

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Alaska Air	A320	296	Average Count	94.5 (275)	94.2 (269)	92.9 (274)	86.4 (274)	84.3 (274)	85.3 (260)	82.9 (264)	85.3 (16)	#N/A (0)	#N/A (0)
	B737	2	Average Count	93.4 (2)	93.1 (2)	93.3 (2)	86.7 (2)	87.1 (2)	88.2 (2)	84.2 (2)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	10	Average Count	95.3 (10)	94.6 (10)	93.6 (10)	88.0 (10)	87.4 (10)	88.4 (9)	84.8 (10)	#N/A (0)	#N/A (0)	#N/A (0)
American	A21N	1	Average Count	88.8 (1)	88.2 (1)	87.2 (1)	78.9 (1)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	159	Average Count	94.1 (144)	93.7 (141)	93.1 (143)	86.2 (142)	84.7 (144)	84.7 (143)	81.1 (124)	84.7 (8)	#N/A (0)	#N/A (0)
	A321	77	Average Count	97.7 (71)	97.5 (69)	96.2 (71)	88.3 (71)	86.3 (72)	86.1 (68)	82.4 (67)	89.0 (3)	#N/A (0)	#N/A (0)
	B738	577	Average Count	97.5 (540)	96.9 (518)	95.9 (533)	89.8 (532)	89.1 (540)	89.6 (502)	85.9 (527)	90.4 (28)	84.5 (6)	82.4 (3)
Delta	A220	133	Average Count	85.8 (125)	86.4 (124)	84.5 (119)	80.0 (86)	78.6 (36)	79.4 (54)	78.7 (2)	80.9 (4)	#N/A (0)	#N/A (0)
	A319	134	Average Count	94.5 (126)	94.1 (124)	93.6 (125)	87.2 (121)	86.1 (125)	86.2 (116)	81.7 (118)	86.2 (6)	80.6 (1)	78.3 (1)
	A320	1	Average Count	96.2 (1)	94.8 (1)	95.2 (1)	88.5 (1)	86.6 (1)	87.8 (1)	83.8 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	B752	147	Average Count	95.1 (137)	95.1 (134)	93.9 (137)	87.5 (130)	86.2 (139)	86.2 (127)	82.1 (134)	87.4 (5)	79.0 (1)	#N/A (0)
FedEx	A306	64	Average Count	97.3 (58)	97.1 (58)	94.5 (53)	88.3 (59)	87.8 (59)	89.3 (59)	85.8 (58)	93.7 (5)	78.9 (1)	80.3 (1)
Frontier Airlines	A20N	94	Average Count	87.3 (91)	87.6 (87)	86.5 (89)	80.9 (63)	79.9 (33)	81.3 (53)	79.8 (12)	82.6 (2)	#N/A (0)	#N/A (0)
	A320	49	Average Count	94.4 (44)	94.3 (42)	92.3 (44)	86.1 (44)	84.8 (43)	85.9 (41)	84.2 (39)	87.1 (3)	#N/A (0)	#N/A (0)
Horizon Air	E175	395	Average Count	91.4 (364)	91.1 (353)	89.2 (361)	84.5 (354)	83.8 (361)	85.5 (353)	82.8 (347)	88.6 (24)	#N/A (0)	#N/A (0)
Southwest	B737	507	Average Count	90.3 (480)	90.5 (466)	88.3 (475)	83.5 (471)	83.3 (473)	83.9 (448)	81.7 (441)	86.8 (24)	82.3 (1)	#N/A (0)
	B738	1148	Average Count	90.9 (1050)	91.0 (1011)	88.3 (1025)	83.2 (1031)	83.3 (1055)	84.0 (1008)	82.0 (1018)	88.1 (75)	78.4 (1)	77.6 (1)
Spirit	A20N	90	Average Count	87.0 (82)	87.1 (82)	86.5 (84)	81.7 (76)	80.4 (48)	81.3 (66)	78.6 (15)	80.5 (4)	#N/A (0)	#N/A (0)
	A320	9	Average Count	88.9 (9)	89.4 (8)	87.3 (9)	82.0 (9)	81.1 (5)	81.2 (7)	79.6 (1)	#N/A (0)	#N/A (0)	#N/A (0)
United	A320	128	Average Count	94.0 (120)	93.6 (118)	92.5 (118)	86.0 (118)	84.4 (118)	85.3 (109)	81.5 (105)	87.9 (5)	#N/A (0)	#N/A (0)
	B737	87	Average Count	94.6 (82)	93.7 (80)	94.4 (81)	89.3 (79)	89.5 (81)	89.4 (79)	85.1 (81)	91.1 (5)	#N/A (0)	#N/A (0)
	B738	323	Average Count	97.5 (294)	96.4 (286)	97.1 (299)	89.8 (299)	89.4 (303)	89.8 (272)	86.8 (296)	90.2 (14)	81.6 (2)	79.9 (2)
UPS	A306	9	Average Count	98.0 (8)	97.8 (8)	97.9 (7)	90.9 (8)	89.3 (8)	89.7 (8)	85.8 (8)	95.2 (1)	79.3 (1)	#N/A (0)
	B752	46	Average Count	94.9 (43)	94.8 (43)	94.0 (39)	86.4 (42)	85.6 (43)	86.7 (43)	82.0 (43)	87.3 (3)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
October - December 2020

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	A220	61	Average Count	86.0 (54)	86.8 (51)	84.3 (53)	80.3 (37)	79.0 (19)	79.7 (16)	#N/A (0)	78.1 (1)	#N/A (0)	79.6 (1)
Horizon Air	E175	90	Average Count	89.3 (84)	89.6 (82)	87.8 (83)	84.1 (78)	83.1 (84)	84.2 (81)	82.3 (79)	87.5 (4)	#N/A (0)	#N/A (0)
SkyWest Coml.	E175	416	Average Count	88.7 (389)	89.1 (364)	87.7 (380)	84.0 (376)	82.9 (377)	83.8 (371)	81.8 (351)	85.9 (22)	#N/A (0)	#N/A (0)
Southwest	B737	354	Average Count	89.5 (332)	89.9 (328)	87.8 (322)	83.3 (328)	82.8 (333)	83.5 (319)	81.4 (317)	88.2 (19)	#N/A (0)	#N/A (0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
October - December 2020

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	283	Average Count	85.5 (267)	85.5 (263)	86.4 (262)	80.0 (199)	79.1 (74)	80.1 (170)	79.0 (3)	83.8 (13)	#N/A (0)	#N/A (0)
	E145	78	Average Count	85.7 (70)	85.8 (71)	86.5 (69)	79.6 (46)	78.3 (17)	79.9 (38)	#N/A (0)	83.4 (2)	#N/A (0)	#N/A (0)
SkyWest	CRJ7	60	Average Count	86.6 (54)	87.3 (56)	86.1 (54)	80.6 (17)	80.7 (38)	80.8 (47)	79.9 (33)	87.0 (4)	#N/A (0)	#N/A (0)
	E175	341	Average Count	89.5 (318)	89.7 (302)	88.1 (308)	84.3 (310)	83.2 (314)	84.3 (309)	82.3 (309)	87.6 (12)	#N/A (0)	#N/A (0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
October - December 2020

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	4117	Average Count	88.0 (3732)	87.4 (3622)	89.1 (3614)	82.7 (2023)	82.3 (1551)	83.9 (2165)	82.1 (896)	84.8 (124)	81.4 (5)	79.4 (2)

TABLE 9
AIR CARRIER OPERATIONAL HISTORY

Carrier	AC Type	Year					
		2016	2017	2018	2019	2020	
Alaska Air	AS	A319			64	244	314
		A320			262	3,403	1,733
		B734	76	24			
		B737	3,258	1,233	384	160	14
		B738	4,439	6,420	8,260	5,247	767
American	AA	A21N				2	2
		A319	178	332	722	432	474
		A320	868	266	78	634	488
		A321	563	56	4	214	571
		B738	10,538	11,556	11,457	10,972	5,201
Compass	CP	B752	74	4	4	36	
		E170	152	78			
Compass	CP	E175	1,669	2,726	3,188	3,150	656
		A220				851	1,954
Delta	DL	A319	3,444	2,053	1,979	1,987	828
		A320	160	94	12	11	8
		B712		3,267	3,379	2,495	
		B737		146	188	8	24
		B738		40	18	40	2
		B739			2		
		B752	2,128	2,137	2,889	2,889	1,065
		MD90			2		
FedEx	FM	A306	510	506	508	510	512
Frontier Airlines	F9	A20N*			600	900	550
		A319	646	356	190	100	2
		A320	740	628	654	428	392
		A321	2				
		A32N*	12	438			
Horizon Air	QX	DH8D	1,156	1,456	728	12	
		E175		339	2,716	4,257	2,986
SkyWest Coml.	SC	CRJ9	1,899	1,440	6		2
		E175	3,554	4,761	6,960	7,686	3,535
Southwest	WN	B38M		2	14	10	
		B737	41,806	35,971	32,380	29,360	14,268
		B738	1,144	58	64	134	3,780
Spirit	NK	A20N*					180
		A320					19
United	UA	A319	1,999	1,470	999	1,216	590
		A320	2,670	3,957	3,927	3,151	1,227
		B737	5,246	4,044	2,987	2,816	999
		B738	1,252	3,302	5,154	5,627	2,645
		B752		2	4		
UPS	5X	A306	52	45	22	12	18
		B752	370	369	394	404	404
WestJet	WS	B736	32	30	10	58	34
		B737	642	644	666	618	126
Total			91,279	90,250	91,875	90,074	46,370

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2016	2017	2018	2019	2020
A20N*			600	900	730
A21N				2	2
A220				851	1,954
A306	562	551	530	522	530
A319	6,267	4,211	3,954	3,979	2,208
A320	4,438	4,945	4,933	7,627	3,867
A321	565	56	4	214	571
A32N*	12	438			
B38M		2	14	10	
B712		3,267	3,379	2,495	
B734	76	24			
B736	32	30	10	58	34
B737	50,952	42,038	36,605	32,962	15,431
B738	17,373	21,376	24,953	22,020	12,395
B739			2		
B752	2,572	2,512	3,291	3,329	1,469
CRJ9	1,899	1,440	6		2
DH8D	1,156	1,456	728	12	
E170	152	78			
E175	5,223	7,826	12,864	15,093	7,177
MD90			2		
Total	91,279	90,250	91,875	90,074	46,370

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 11
AIR CARRIER AVERAGE DAILY DEPARTURE HISTORY

Carrier	AC Type	Year					
		2016	2017	2018	2019	2020	
Alaska Air	AS	A319			.088	.334	.432
		A320			.359	4.660	2.363
		B734	.104	.033			
		B737	4.451	1.693	.526	.219	.022
		B738	6.066	8.789	11.315	7.189	1.046
American	AA	A21N				.003	.003
		A319	.243	.455	.989	.592	.648
		A320	1.186	.364	.107	.868	.664
		A321	.770	.077	.005	.293	.779
		B738	14.402	15.827	15.696	15.030	7.107
Compass	CP	B752	.101	.005	.005	.049	
		E170	.208	.107			
Delta	DL	E175	2.279	3.734	4.367	4.315	.896
		A220				1.164	2.667
		A319	4.705	2.811	2.712	2.723	1.131
		A320	.219	.129	.016	.014	.014
		B712		4.471	4.627	3.419	
		B737		.200	.258	.011	.033
		B738		.055	.025	.055	.003
		B739			.003		
		B752	2.910	2.926	3.959	3.956	1.454
FedEx	FM	MD90			.003		
		A306	.697	.693	.696	.699	.699
Frontier Airlines	F9	A319			.822	1.233	.751
		A320	1.011	.860	.896	.586	.536
		A321	.003				
		A32N*	.016	.600			
		DH8D	1.579	1.995	.997	.016	
Horizon Air	QX	E175		.466	3.721	5.830	4.079
		CRJ9	2.593	1.975	.008		.003
SkyWest Coml.	SC	E175	4.855	6.523	9.534	10.529	4.833
		B38M		.003	.019	.014	
Southwest	WN	B737	57.104	49.274	44.351	40.216	19.497
		B738	1.563	.079	.088	.184	5.161
		A20N*					.246
Spirit	NK	A320					.025
		A319	2.730	2.014	1.373	1.666	.806
United	UA	A320	3.648	5.422	5.375	4.315	1.675
		B737	7.169	5.534	4.093	3.855	1.366
		B738	1.710	4.526	7.058	7.712	3.612
		B752		.003	.005		
		A306	.071	.060	.030	.016	.025
UPS	5X	B752	.505	.507	.540	.553	.552
		B736	.044	.041	.014	.079	.046
WestJet	WS	B737	.877	.882	.912	.847	.172
		Total	124.699	123.622	125.852	123.384	63.347

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 12
AIRCRAFT Glossary

AC Type	Make	Model/Series
A220	Airbus	220
A20N	Airbus	320-200 Neo
A306	Airbus	300-600
A319	Airbus	319
A320	Airbus	320
A32N	Airbus	320-200 Neo
A21N	Airbus	321 Neo
B38M	Boeing	737-800 Max
B712	Boeing	717-200
B734	Boeing	737-400
B736	Boeing	737-600
B737	Boeing	737-700
B738	Boeing	737-800
B739	Boeing	737-900
B752	Boeing	757-200
CRJ7	Canadair Regional Jet	700
CRJ9	Canadair Regional Jet	900
DH8D	Bombardier	Dash 8
E135	Embraer	135
E145	Embraer	145
E170	Embraer	170
E175	Embraer	175
MD90	McDonnell Douglas	90

QUARTERLY NOISE MEETING

Date: December 16, 2020

Time: 2:00 PM

Place: Executive Conference Room/Teleconference

ITEMS DISCUSSED

Nikolas Gaskins informed attendees that upcoming quarterly meetings will take place virtually due to the pandemic, and the platform used will be determined at a later date. Mr. Gaskins stated that due to the current workload involving pandemic impact analysis, JSX litigation, and new entrant air carrier preparations, the Access and Noise Office (ANO) response time for requests may be delayed.

Mr. Gaskins provided a summary of October 2020 JWA airport statistics. Through October, there was a 60-65% decrease in passenger volume compared to the same period last year. He also mentioned that there had been an increase in general aviation operations, and a decrease in commercial carrier operations. Mr. Gaskins noted that there is currently no international service due to the Canadian travel restrictions in place.

Mr. Gaskins stated that the capacity allocations for Plan Year 2021 were approved by the Board of Supervisors on November 3, 2020. He also mentioned that new entrant air carrier, Spirit Airlines, began service November 17, 2020. To summarize new entrant allocations for Plan Year 2021, Mr. Gaskins stated that Air Canada, Allegiant Air, and Sun Country Airlines will begin service in early to mid-2021. Mr. Gaskins then went on to discuss that the Airport had already received numerous capacity returns for Plan Year 2021, and that to date, 1.3 million seats had been returned for Q1. He also mentioned that the Airport was waiving cumulative return time penalties for Q1, but enforcing minimum use requirements. He stated the Airport is evaluating the situation to determine if that waiver would be extended through Q2.

Mr. Gaskins provided an overview of ANO duties; which include enforcing the Settlement Agreement, Access Plan, and General Aviation Noise Ordinance. Mr. Gaskins also mentioned that the ANO is working with the City of Newport Beach to identify the most efficient manner to streamline requests from the community.

Dr. Jim Mosher was concerned with the modest reduction in the Q1 2020 contours. Mr. Gaskins mentioned that the modest reduction was due to the contour including 2019 CNEL values. Mr. Gaskins stated that the impacts of COVID-19 and its effect on the contour would become more

apparent in the Q3 and/or Q4 2020 contours. Mr. Gaskins mentioned that Justin Cook of HMMH will provide further detailed information to the Airport at a later date.

Dr. Mosher asked if there is a deadline for return seats/capacity requests. Mr. Gaskins informed him that the notification requirements for returns was modified from 45 days to 30 days.

Concerns regarding the accuracy of the Airport's public flight tracking system (VOLANS) was discussed. Dr. Mosher commented that VOLANS measures noise levels and shows aircraft location at a particular moment. Dr. Mosher also confirmed that noise readings match the reports. Dr. Mosher shared he had verified with a camera at NMS 3 and near Newport Dunes, and photographs prove VOLANS flight tracks are extremely accurate. Dr. Mosher asked if the ANO had a better understanding on the accuracy of velocity in VOLANS. Mr. Gaskins explained that VOLANS data is not inaccurate. He stated that the noise data is one second Leq noise metrics. Mr. Gaskins also noted that VOLANS data, which is considered raw data, is available within 60 minutes. Therefore, some initial inaccuracies in the flight track data may appear but are corrected within hours.

Dennis Bress asked to have access to accurate and reliable data in order to communicate with air carriers to fly a certain procedure. Mr. Gaskins informed he will discuss this request to provide access to data for Mr. Bress with the Airport Director and Deputy Airport Director of Public Affairs.

Alan Gunther asked about history of VOLANS (selection and cost). Mr. Guenther was interested in knowing if there was anything better than VOLANS. Mr. Gaskins informed Mr. Guenther that VOLANS fit the Airport's needs at the time of selection of a system and vendor. Mr. Gaskins stated that VOLANS is not a tool to measure speed, but instead an application that allows the general public to have an general sense of aircraft activity in the vicinity of their residence. Mr. Gaskins mentioned that JWA plans to move to WebTrak in summer 2021, which is a component of ANOMS and Viewpoint.

Julie Johnson asked how FAA monitors FAR rules and regulations. What does the FAA use to know if airlines are in compliance? Mr. Gaskins will research and provide information at a later date.

QUARTERLY NOISE MEETING ROSTER

December 16, 2020

<u>NAME</u>	<u>ORGANIZATION</u>
Alan Gunther	Member, Newport Beach Aviation Committee
Dennis Bress	Resident – Newport Beach
Jack Stranberg	Member, Newport Beach Aviation Committee
Jim Mosher	Resident – Newport Beach
Julie Johnson	Resident – Newport Beach
Anthony Cangey	John Wayne Airport
Beatrice Siercke	John Wayne Airport
Cristina Magaña	John Wayne Airport
Nikolas Gaskins	John Wayne Airport

SUMMARY OF STATISTICAL INFORMATION
FOR
CALIFORNIA DEPARTMENT OF TRANSPORTATION

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, chapter 2.5, Subchapter 6):
0.0005 Sq. Mi.
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
3
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
7.5 (Based on 2.5 People/Dwelling Unit)
4. Identification of aircraft of type having highest takeoff noise level operating at this airport together with estimated number of operations by this aircraft type during the calendar quarter reporting period:
B737-800 – 4,115 (Arrivals + Departures)
5. Total number of aircraft operations during the calendar quarter:
60,054
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)
12,346
7. Percentage of Air Carrier operations by aircraft certified under Federal Aviation Regulation (FAR) Part 36, Stage III:
(Not mandatory)
100%
8. Estimated number of operations by General Aviation aircraft during the calendar quarter:
(Not mandatory)
47,599
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)
109